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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)		
	09/831,600	KIVELA ET AL.		
Office Action Summary	Examiner	Art Unit		
	WILLIAM K. CHEUNG	1796		
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on 29 J     This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for alloward closed in accordance with the practice under the second sec	s action is non-final. ince except for formal matters, pro			
Disposition of Claims				
4)  Claim(s) 1,3,4,7-25,29 and 31-34 is/are pendi 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 1,3,4,7-25,29 and 31-34 is/are reject 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	ed.			
Application Papers				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed a composed and a c	cepted or b) objected to by the Education of the drawing(s) be held in abeyance. See tion is required if the drawing(s) is object.	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1)  Notice of References Cited (PTO-892)	4) 🔲 Interview Summary			
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:			

Art Unit: 1796

### **DETAILED ACTION**

# Request for Continued Examination

- 1. The request filed on January 29, 2010 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 09/831,600 is acceptable and a RCE has been established. An action on the RCE follows.
- 2. In view of amendment filed December 30, 2009, claims 2, 5, 6, 26-28, 30 have been cancelled. Claims 1, 3, 4, 7-25, 29, 31-34 are pending. The support for "a gas is returned into the gas phase reactor at a point above the level of the fluidized bed" is supported by the PGPUB 2004/0213706 (page 4, 0074; Figure 2).

#### Claim Rejections - 35 USC § 112

3. Claims 1, 3, 4, 7-25, 29, 31-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 (line 23-24), claim 13 (line 21-22), claim 14 (line 18-19), claim 29 (line 10), claim 33 (line 22-23), the recitations "second outlet nozzle" are considered "new matter" since applicants' original specification fails to provide support the recited subject matter to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 29 (line 10-11), the recitation "a second outlet nozzle located at the same level as the fluidized bed" is considered "new matter" since applicants' original specification fails to provide support the recited subject matter to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Contrary to applicants' believes, paragraph [0056] of the PBPUB 2204/0213706 fails to provide support the amended feature. Although applicants' previously mentioned, in the response of November 3, 2008, that claim 32 provides the support for the "second outlet nozzle" feature, applicants must recognize that claim 32 is not a claim that is originally filed.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Bernier et al. (US 5,834,571), for the reasons adequately set forth from paragraph 3 of the office action of July 30, 2009.
- 14. (Currently Amended) A method of discharging polymer from a continuously operated gas phase reactor, wherein at least one monomer is polymerized in a bed containing active catalyst formed by catalyst and polymer particles suspended in a fluid, said bed defining a fluidized bed level in said reactor, comprising:

Art Unit: 1796

 continuously withdrawing polymer powder from the reactor through a first outlet nozzle located at a point above a fluidization plate where no lumps are present;

- feeding the withdrawn polymer powder into a collecting vessel, wherein lumps are separated from finely-divided polymer powder through a second outlet nozzle located at the same level as the fluidized bed and at least a part of the gas is separated from the solid material;
- recovering the lumps; and
- adjusting a discharge rate of the polymer powder so as to maintain a constant bed level during polymerization, wherein the discharge rate of the polymer powder is adjusted by using a continuously operated control valve, and the operation of the control valve is adjusted by using a control signal obtained from a bed level controller,

wherein a gas is returned into the gas phase reactor at a point above the level of the fluidized bed, and recovered lumps are withdrawn from a collecting vessel through a second outlet nozzle.

Bernier et al. (col. 39, claim 1) claim a method of producing a polymer in a continuously operated gas phase reactor, polymerizing at least one monomer in a bed containing active catalyst formed by catalyst and polymer particles suspended in a fluid (col. 39, line 25-33), and adjusting a discharge rate (continuously or intermittently) to withdraw polymer product from the reactor (col. 39, 40-42). Since the withdrawal of the polymer product also accompanied with the withdrawal of the fluidized recycle gas, the examiner has a reasonable basis that the claimed "adjusting a discharge rate of the polymer powder so as to maintain a constant bed level during polymerization" is met by Bernier et al. since Bernier et al. (col. 39, line 45-49) clearly indicate that the fluidized bed level is maintained by withdrawing recycle gas from the reactor.

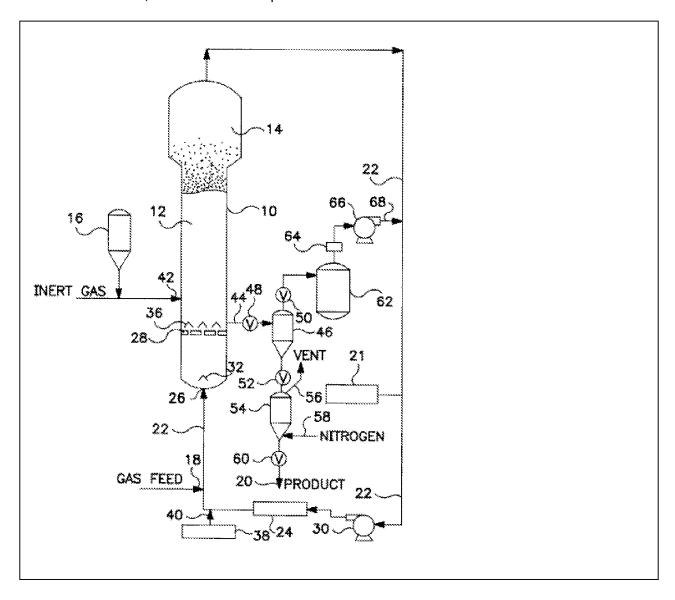
Because the polymer product discharge rate of Bernier et al. can be conducted intermittently from the reactor, and that the agglomerate particles contents withdrawn from the fluidized bed reactor are time dependent, therefore, the examiner has a reasonable basis that the claimed "separately recovering particle agglomerates from the reactor" is inherently possessed in Bernier et al.

Regarding the claimed "control valve is adjusted to provide for pulsating operation to prevent clogging of the valve", Bernier et al. (col. 39, 40-42) clearly indicate adjusting a discharge rate (continuously or intermittently) to withdraw polymer product from the reactor. Since the withdrawal process of Bernier et al. can be adjusted to run continuously and intermittently, the examiner has a reasonable basis that the process of Bernier et al. are controlled with control valves. Regarding "pulsating", when the process of Bernier et al. is run intermittently, the process of Bernier et al. would inherently possessed the claimed "pulsating" feature by the intermittent changes of the withdrawal rate or flow rate. According to applicants' specification (page 3, line 13-14), applicants admittedly agrees that when a process is run discontinuously, it would lead to "a pulsating operation".

Regarding the claimed "first outlet nozzle", applicants must recognize that Bernier et al. (figure, items 44 (valve 48)) disclose the <u>first outlet nozzle</u> where the polymers are continuously withdrawn. Regarding the claimed "second outlet nozzle", Bernier et al. (figure, item 50) clearly disclose a <u>second outlet nozzle</u> for separately recovering particle agglomerates from the reactor. Both outlets are also located above

the distribution plate or at the level that is same as the level of the fluidization bed area (12) of the figure of Bernier et al.

Therefore, claim 14 is anticipated.



Applicant's arguments filed December 30, 2009 have been fully considered but they are not persuasive. Applicants argue that Bernier et al. do not teach the two outlets located at a specific location as claimed. Regarding the claimed "first outlet"

nozzle", applicants must recognize that Bernier et al. (figure, items 44 (valve 48)) disclose the <u>first outlet nozzle</u> where the polymers are continuously withdrawn. Regarding the claimed "second outlet nozzle", Bernier et al. (figure, item 50) clearly disclose a <u>second outlet nozzle</u> for separately recovering particle agglomerates from the reactor. Regarding the claimed locations "located at a point above a fluidization plate" and "located at the same level as the fluidized bed", although the wordings are different, the recitations are designating the same locations were both recited locations are located above the fluidization plate (distribution plate). Applicants must recognize that "the fluidized bed" level is also above the distribution plate.

Regarding applicants' argument that the claimed invention is novel because the claimed invention involves a continuous step and discontinuous step at the same time while Bernier et al. only disclose a process that can be run either continuously or intermittently, but not at the same time, applicants fail to recognize that the claims as written fail to support for such argument where the claimed invention involves a continuous step and discontinuous step at the same time. As written, the claimed processing steps can be run sequentially. Further, in his argument, applicants have no basis to equate "interrupted" to "intermittent" because "intermittent" also implies that the process step can be recurring while "interrupted" does not. In view of the reasons set forth above and in view of the 112 rejection set forth, the examiner has a reasonable basis to maintain the rejection set forth.

Art Unit: 1796

# Claim Rejections – 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 1, 3, 4, 7-25, 29, 31-32, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernier et al. (US 5,834,571) for the reasons adequately set forth from paragraph 5 of office action of July 30, 2009.

Art Unit: 1796

1. (Currently Amended) A method of producing a polymer in a continuously operated gas phase reactor, comprising:

- polymerizing at least one monomer in a bed containing active catalyst formed by

catalyst and polymer particles suspended in a fluid, said bed defining a fluidized bed

level in said reactor,

- continuously withdrawing polymer powder from the reactor through a first outlet

nozzle located at a point above a fluidization plate where no lumps are present;

- adjusting a discharge rate of the polymer powder so as to maintain a constant bed

level during polymerization; and

- separately recovering particle agglomerates from the reactor by discontinuously

withdrawing the particle agglomerates through a second outlet-nozzle-located at the

same level as the fluidized bed,

wherein the discharge rate of the polymer powder is adjusted by using a continuously

operated control valve, and the operation of the control valve is adjusted by using a control

signal obtained from a bed level controller,

wherein the control valve is adjusted to provide for pulsating operation to prevent

clogging of the valve, [[and]]

wherein the ratio between the polymer powder continuously discharged from the reactor

and the polymer particle agglomerates discontinuously withdrawn is in the range of 1:1 to

10,000:1,

wherein a gas is returned into the gas phase reactor at a point above the level of the

fluidized bed, and

wherein recovered lumps are withdrawn from a collecting vessel through a second outlet

<u>nozzle</u>.

Art Unit: 1796

13. (Currently Amended) A method of producing a polymer in a continuously operated gas phase reactor, comprising:

- polymerizing at least one monomer in a bed containing active catalyst formed by catalyst and polymer particles suspended in a fluid, said bed defining a fluidized bed level in said reactor,
- continuously withdrawing polymer powder from the reactor through a first outlet nozzle located at a point above a fluidization plate where no lumps are present;
- adjusting a discharge rate of the polymer powder so as to maintain a constant bed level during polymerization; and
- withdrawing particle agglomerates from the reactor through a second outlet nozzle
  located at the same level as the fluidized bed with a discontinuously operated
  discharge valve;

wherein the discharge rate of the polymer powder is adjusted by using a continuously operated control valve, and the operation of the control valve is adjusted by using a control signal obtained from a bed level controller, [[and]]

wherein the ratio between the polymer powder continuously discharged from the reactor and the polymer particle agglomerates discontinuously withdrawn is in the range of 1:1 to 10,000:1,

wherein a gas is returned into the gas phase reactor at a point above the level of the fluidized bed, and

wherein recovered lumps are withdrawn from a collecting vessel through a second outlet nozzle.

14. (Currently Amended) A method of discharging polymer from a continuously operated gas phase reactor, wherein at least one monomer is polymerized in a bed containing active catalyst formed by catalyst and polymer particles suspended in a fluid, said bed defining a fluidized bed level in said reactor, comprising:

Art Unit: 1796

 continuously withdrawing polymer powder from the reactor through a first outlet nozzle located at a point above a fluidization plate where no lumps are present;

- feeding the withdrawn polymer powder into a collecting vessel, wherein lumps are separated from finely-divided polymer powder through a second outlet nozzle-located at the same level as the fluidized bed and at least a part of the gas is separated from the solid material;
- recovering the lumps; and
- adjusting a discharge rate of the polymer powder so as to maintain a constant bed level during polymerization, wherein the discharge rate of the polymer powder is adjusted by using a continuously operated control valve, and the operation of the control valve is adjusted by using a control signal obtained from a bed level controller,

wherein a gas is returned into the gas phase reactor at a point above the level of the fluidized bed, and recovered lumps are withdrawn from a collecting vessel through a second outlet nozzle.

- 29. (Currently Amended) A method of producing a polymer in a continuously operated gas phase reactor, comprising:
  - polymerizing at least one monomer in a bed containing active catalyst formed by catalyst and polymer particles suspended in a fluid, said bed defining a fluidized bed level in said reactor,
  - continuously withdrawing polymer powder from the reactor through a first outlet nozzle <u>located at a point above a fluidization plate where no lumps are present;</u>
  - adjusting a discharge rate of the polymer powder so as to maintain a constant bed
     level during polymerization; and
  - withdrawing particle agglomerates from the reactor through a second outlet nozzle
     located at the same level as the fluidized bed;

wherein the discharge rate of the polymer powder is adjusted by using a continuously operated control valve, said operation of the control valve is adjusted by using a control signal obtained from a bed level controller, and

wherein the ratio between the polymer powder continuously discharged from the reactor and the polymer particle agglomerates discontinuously withdrawn is in the range of 1:1 to 10,000:1.

Bernier et al. (col. 39, claim 1) claim a method of producing a polymer in a continuously operated gas phase reactor, polymerizing at least one monomer in a bed containing active catalyst formed by catalyst and polymer particles suspended in a fluid (col. 39, line 25-33), and adjusting a discharge rate (continuously or intermittently) to withdraw polymer product from the reactor (col. 39, 40-42). Since the withdrawal of the polymer product also accompanied with the withdrawal of the fluidized recycle gas, the examiner has a reasonable basis that the claimed "adjusting a discharge rate of the polymer powder so as to maintain a constant bed level during polymerization" is met by Bernier et al. since Bernier et al. (col. 39, line 45-49) clearly indicate that the fluidized bed level is maintained by withdrawing recycle gas from the reactor.

Because the polymer product discharge rate of Bernier et al. can be conducted intermittently from the reactor, and that the agglomerate particles contents withdrawn from the fluidized bed reactor are time dependent, therefore, the examiner has a reasonable basis that the claimed "separately recovering particle agglomerates from the reactor" is inherently possessed in Bernier et al.

Although Bernier et al. do not explicitly indicate that the control valve can be adjusted to provide pulsation to prevent clogging of the valve", Bernier et al. (col. 39, 40-

42) clearly indicate adjusting a discharge rate (continuously or intermittently) to withdraw polymer product from the reactor, which can cause pulsation. Since the withdrawal process of Bernier et al. can be adjusted to run continuously and intermittently, motivated by the expectation of success of developing the gas phase polymerization process of Bernier et al. (col. 1, line 14-28), it would have been obvious to one of ordinary skill in art to run the gas phase polymerization which associates a discharging the polymer product continuously or intermittently to obtain the pulsating feature as claimed.

Regarding the claimed "first outlet nozzle", applicants must recognize that

Bernier et al. (figure, items 44 (valve 48)) disclose the <u>first outlet nozzle</u> where the

polymers are continuously withdrawn. Regarding the claimed "second outlet nozzle",

Bernier et al. (figure, item 50) clearly disclose a <u>second outlet nozzle</u> for separately

recovering particle agglomerates from the reactor. Both outlets are also located above
the distribution plate or at the level that is same as the level of the fluidization bed area

(12) of the figure of Bernier et al.

The difference between Bernier et al. and claims 1, 3, 4, 7-25, 29, 31-32, 34 is that Bernier et al. do not explicitly disclose "the ratio between the polymer powder continuously discharged from the reactor and the polymer particle agglomerates discontinuously withdrawn is in the range of 1:1 to 10,000:1" as claimed.

Nevertheless, Bernier et al. (figure, items 44 (valve 48)) disclose the <u>first outlet</u> nozzle where the polymers are continuously withdrawn, and Bernier et al. (figure, item 50) clearly disclose a <u>second outlet nozzle</u> for separately recovering particle

agglomerates from the reactor. Therefore, the process of Bernier et al. clearly inherently "a ratio between the polymer powder continuously discharged from the reactor and the polymer particle agglomerates discontinuously withdrawn". Bernier et al. (col. 39, claim 1) do not set any limit on the ratio between the polymer powder continuously discharged from the reactor and the polymer particle agglomerates discontinuously withdrawn, the examiner has a reasonable basis that the claimed ratio is generically encompassed the invention of Bernier et al. Motivated by the expectation of obtaining the process of obtaining the product discharge process of Bernier et al., it would have been obvious to one of ordinary skill in art to apply "routine optimization" process technique to vary the ratio between the polymer powder continuously discharged from the reactor and the polymer particle agglomerates discontinuously withdrawn to obtain the invention as claimed.

For overcoming the obvious rejection, applicants filed a declaration (November 3, 2008) to state that the process disclosed in Bernier et al. does not possess the claimed ratio by stating that the ratio as taught in Bernier et al. is much less than 0.1:1 (versus the ratio range of 1:1 to 10,000:1 as claimed. However, in reviewing the declaration filed November 3, 2008, it is unclear how applicants have arrived to the conclusion that the ratio of much less than 0.1:1. In view of lack of evidence, the examiner has a reasonable basis to believe that the declaration fails to overcome the 103 rejection set forth.

Applicant's arguments filed December 30, 2009 have been fully considered but they are not persuasive. Applicants argue that Bernier et al. do not teach the two

outlets as claimed. Regarding the claimed "first outlet nozzle", applicants must recognize that Bernier et al. (figure, items 44 (valve 48)) disclose the <u>first outlet nozzle</u> where the polymers are continuously withdrawn. Regarding the claimed "second outlet nozzle", Bernier et al. (figure, item 50) clearly disclose a <u>second outlet nozzle</u> for separately recovering particle agglomerates from the reactor. Both outlets are also located above the distribution plate or at the level that is same as the level of the fluidization bed area (12) of the figure of Bernier et al.

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Regarding applicants' argument that the claimed invention is novel because the claimed invention involves a continuous step and intermittent step at the same time while Bernier et al. only disclose a process that can be run either continuously or intermittently, but not at the same time, applicants fail to recognize that the claims as written fail to support for such argument where the claimed invention involves a continuous step and discontinuous step at the same time. As written, the claimed processing steps can be run sequentially. Further, in his argument, applicants have no

Art Unit: 1796

basis to equate "interrupted" to "intermittent" because "intermittent" also implies that the process step can be recurring while "interrupted" does not. In view of the reasons set forth above and in view of the 112 rejection set forth, the examiner has a reasonable basis to maintain the rejection set forth.

- 8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernier et al. (US 5,834,571) in view of Koves (US 4,959,198) for the reasons adequately set forth from paragraph 6 of the office action of December 30, 2009.
- 33. (Currently Amended) A method of producing a polymer in a continuously operated gas phase reactor, comprising:
  - polymerizing at least one monomer in a bed containing active catalyst formed by catalyst and polymer particles suspended in a fluid, said bed defining a fluidized bed level in said reactor,

Art Unit: 1796

 continuously withdrawing polymer powder from the reactor through a first outlet nozzle located at a point above a fluidization plate where no lumps are present;

- adjusting a discharge rate of the polymer powder so as to maintain a constant bed level during polymerization; and
- separately recovering particle agglomerates from the reactor by discontinuously
  withdrawing the particle agglomerates through a second outlet nozzle located at the
  same level as the fluidized bed,

wherein the discharge rate of the polymer powder is adjusted by using a continuously operated control valve, and the operation of the control valve is adjusted by using a control signal obtained from a bed level controller, [[and]]

wherein the first outlet nozzle is connected to the control valve, and is provided with a grid flush mounted at the reactor wall to prevent lumps from entering the pipe, [[and]]

wherein the ratio between the polymer powder continuously discharged from the reactor and the polymer particle agglomerates discontinuously withdrawn is in the range of 1:1 to 10,000:1, and

wherein a gas is returned into the gas phase reactor at a point above the level of the fluidized bed, and recovered lumps are withdrawn from a collecting vessel through a second outlet nozzle.

Set forth from paragraph 5 of instant office action, claim 33 is very similar to the method as taught in Bernier et al.

The difference between the invention of claim 33 and Bernier et al. is that Bernier et al. do not disclose a grid flush mounted to the reactor wall to prevent lumps from entering the pipe.

However, Koves (col. 2, line 16) clearly disclose the use of retention screen (or grid) for confining particles to be within the fluidized wall. According to Koves (col. 2, line

16) clearly disclose the motivation for installing a retention screen. Motivated by the expectation of success of better control of confining particles to be within the fluidized wall, it would have been obvious to one of ordinary skill in art to install a retention screen or a grid to the outlet as taught in Bernier to obtain the grid feature of claim 33.

Regarding the claimed "flush mounted" feature, applicants must recognize that that "flush mounted" is merely a design choice within the teachings of Koves on the installing a grid onto the outlet of Koves. In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice). Motivated by the expectation of success of reducing the disturbance on the flow of the particles within the reactor wall, it would have been obvious and predictable to one of ordinary skill in art to install the grid in a "flush mounting" fashing, in view of KSR International Co. v. Teleflex Inc. (KSR), 550 U.S. , 82 USPQ2d 1385 (2007).

Applicant's arguments filed December 30, 2009 have been fully considered but they are not persuasive. Applicants argue that Bernier et al. do not teach the two outlets as claimed. Regarding the claimed "first outlet nozzle", applicants must recognize that Bernier et al. (figure, items 44 (valve 48)) disclose the <u>first outlet nozzle</u> where the polymers are continuously withdrawn. Regarding the claimed "second outlet nozzle", Bernier et al. (figure, item 50) clearly disclose a <u>second outlet nozzle</u> for separately recovering particle agglomerates from the reactor. Both outlets are also located above the distribution plate or at the level that is same as the level of the fluidization bed area (12) of the figure of Bernier et al.

Art Unit: 1796

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Regarding applicants' argument that the claimed invention is novel because the claimed invention involves a continuous step and intermittent step at the same time while Bernier et al. only disclose a process that can be run either continuously or intermittently, but not at the same time, applicants fail to recognize that the claims as written fail to support for such argument where the claimed invention involves a continuous step and discontinuous step at the same time. As written, the claimed processing steps can be run sequentially. Further, in his argument, applicants have no basis to equate "interrupted" to "intermittent" because "intermittent" also implies that the process step can be recurring while "interrupted" does not. In view of the reasons set forth above and in view of the 112 rejection set forth, the examiner has a reasonable basis to maintain the rejection set forth.

Art Unit: 1796

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/William K Cheung/ Primary Examiner, Art Unit 1796

William K. Cheung, Ph. D. Primary Examiner February 13, 2010

Application/Control Number: 09/831,600

Page 21

Art Unit: 1796